

Amendments to the Claims

1. (CURRENTLY AMENDED) A method of converting of a first set ~~(100a)~~ of initial segments of an image into a second set ~~(100b)~~ of updated segments ~~(A',B',C',D')~~ of the image, the method comprising iterative updates of intermediate segments ~~(A,B,C,D)~~ being derived from respective initial segments, a particular update comprising determining whether a particular pixel ~~(300)~~ being located at a border ~~(302)~~ between a first one of the intermediate segments ~~(A)~~, and a second one of the intermediate segments ~~(B)~~, should be moved from the first one of the intermediate segments ~~(A)~~ to the second one of the intermediate segments ~~(B)~~, on basis of a pixel value of the particular pixel, on basis of a first parameter of the first one of the intermediate segments ~~(A)~~ and on basis of a second parameter of the second one of the intermediate segments ~~(B)~~, characterized in that first a number of iterative updates are performed for pixels of a first two-dimensional block of pixels ~~(200)~~ of the image and after that the number of iterative updates are performed for pixels of a second two-dimensional block of pixels ~~(204)~~ of the image.

2. (ORIGINAL) A method of converting as claimed in claim 1, characterized in that the first parameter corresponds to a mean color value of the first intermediate segment, the second parameter corresponds to a mean color value of the second intermediate segment and the pixel value of the particular pixel represents the color value of the particular pixel.

3. (CURRENTLY AMENDED) A method of converting as claimed in ~~claim 1 or~~ claim 1, characterized in that the particular update is based on a regularization term depending on the shape of the first one of the intermediate segments, the regularization term being computed on basis of a first group of pixels of the first two-dimensional block of pixels.

4. (ORIGINAL) A method of converting as claimed in claim 1, characterized in that a first sequence of the number of iterative updates are performed in a row-by-row scanning within the first block of pixels and a second sequence of the number of

iterative updates are performed in a column-by-column scanning within the first block of pixels.

5. (ORIGINAL) A method of converting as claimed in claim 1, characterized in that the first two-dimensional block of pixels is located adjacent to the second two-dimensional block of pixels.

6. (ORIGINAL) A method of converting as claimed in Claim 1, characterized in that the regularization term is computed on basis of the first group of pixels of the first two-dimensional block of pixels and a second group of pixels of the second two-dimensional block of pixels.

7. (CURRENTLY AMENDED) A conversion unit ~~(706)~~ for converting a first set ~~(100a)~~ of initial segments of an image into a second set ~~(100b)~~ of updated segments ~~(A',B',C',D')~~ of the image, the conversion unit being arranged to perform iterative updates of intermediate segments ~~(A,B,C,D)~~ being derived from respective initial segments, a particular update comprising determining whether a particular pixel ~~(300)~~ being located at a border ~~(302)~~ between a first one of the intermediate segments ~~(A)~~, and a second one of the intermediate segments ~~(B)~~, should be moved from the first one of the intermediate segments ~~(A)~~ to the second one of the intermediate segments ~~(B)~~, on basis of a pixel value of the particular pixel, on basis of a first parameter of the first one of the intermediate segments ~~(A)~~ and on basis of a second parameter of the second one of the intermediate segments ~~(B)~~, characterized in that the conversion unit ~~(706)~~ comprises computation means for performing first a number of iterative updates for pixels of a first two-dimensional block of pixels ~~(200)~~ of the image and for, after that, performing the number of iterative updates for pixels of a second two-dimensional block of pixels ~~(204)~~ of the image.

8. (CURRENTLY AMENDED) An image processing apparatus ~~(600)~~, comprising:

- receiving means ~~(602)~~ for receiving a signal representing an image;
- a segmentation unit ~~(604)~~ for determining a first set of initial segments of the image;

- a conversion unit ~~(606)~~ for converting the first set of initial segments into a second set of updated segments, the conversion unit as claimed in claim 7; and
- an image processing unit ~~(608)~~ for processing the image on basis of the second set of updated segments.

9. (CURRENTLY AMENDED) An image processing apparatus ~~(600)~~ as claimed in claim 8, whereby the image processing unit ~~(608)~~ is designed to perform video compression.